

Maine Central Railroad
Kennebec County
Waterville, Maine
A-428-71-G-R/A (SM)

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**Departmental
Findings of Fact and Order
Air Emission License**

After review of the air emissions license application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

1. Maine Central Railroad (MCR) of Waterville, Maine has applied to renew their Air Emission License permitting the operation of emission sources associated with their Waterville, Maine railroad yard and locomotive/railcar maintenance facility.
2. This renewal will also include an amendment to update the facility's emissions equipment inventory to include a power washer unit that was not listed as licensed in the facility's previous air permit.

B. Emission Equipment

MCR is authorized to operate the following equipment:

Fuel Burning Equipment

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (gal/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Stack #</u>
Boiler #1	20.7	138	#6 fuel oil, 0.5% #4 fuel oil, 0.5% Specification waste oil, 0.7%	9A
Boiler #2	20.7	138	#6 fuel oil, 0.5% #4 fuel oil, 0.5% Specification waste oil, 0.7%	9B
Vat Room Boiler	2.05	17.1	#2 fuel oil, 0.5%	8
Paint Shop Boiler	1.9	16.0	#2 fuel oil, 0.5%	12
Heater #1	1.1	8.9	#2 fuel oil, 0.5%	2
Heater #2	1.6	13.0	#2 fuel oil, 0.5%	3

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Power Washer Engines

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (gal/hr)</u>	<u>Fuel Type, % sulfur</u>
Power Washer Engine #1	0.6	4.9	#2 fuel oil, 0.5%
Power Washer Engine #2	0.6	4.9	#2 fuel oil, 0.5%

Process Equipment

<u>Equipment</u>	<u>Pollution Control Equipment</u>	<u>Stack #</u>
Spray Booth	Particulate Filter	Atmosphere
Spray Booth	none	Atmosphere
Sand Blast Booth	Particulate Filter	Atmosphere
Zep Parts Washers (2)	none	Atmosphere

C. Application Classification

MCR is a licensed source with equipment that has not been addressed in the facility's previous air emissions licenses. The license renewal shall include the operation of the previously unlisted equipment. Therefore, the application for Maine Central Railroad is considered to be a renewal and amendment.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Department regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emission from the source being considered; and
- the economic feasibility for the type of establishment involved.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in Chapter 100 of the Air Regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impact

B. Boiler units

The MCR railroad yard in Waterville, Maine is an existing facility at which locomotive and boxcar service, maintenance, repair, spray painting and associated operations are conducted.

1. Boilers 9A & 9B

MCR operates Boilers #9A and #9B primarily to satisfy the facilities heat and hot water needs. Boilers #9A and #9B each have a maximum input capacity of 20.7 MMBtu/hr firing #6 fuel oil with a sulfur content not to exceed 0.5% by weight, #4 fuel oil with a sulfur content not to exceed 0.5% by weight or specification waste oil with a maximum sulfur content not to exceed 0.7% by weight.

Boilers #9A and #9B were both manufactured and installed in 1976 and are therefore not subject to EPA New Source Performance Standards (NSPS) Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units applicable to boilers with a heat input of greater than 10 MMBtu/hr and manufactured after June 9, 1989).

MCR's previous license restricted the facility to an annual fuel oil limit for Boilers #9A and #9B combined of no greater than 200,000 gallons per year (gal/yr) of a combination of #6 fuel oil with a sulfur content not to exceed 0.5% by weight, #4 fuel oil with a sulfur content not to exceed 0.5% by weight or specification waste oil with a maximum sulfur content not to exceed 0.7% by weight based on a twelve-month rolling total. MCR has proposed an increase of this limit to 250,000 gal/year of a combination of the above mentioned fuel oils based on a twelve-month rolling total. The Department has determined that an increase in the fuel limit would require an application of BACT. In this case BACT is satisfied with the requirement of the reduced sulfur content fuel oil. BACT for #6 fuel oil is a sulfur content of no greater than 0.5% sulfur by weight, BACT for #4 fuel oil is a sulfur content of no greater than 0.5% sulfur by weight and BACT for specification waste oil is the same no greater than 0.7% sulfur by weight.

In order to demonstrate compliance with the above fuel oil restrictions, MCR shall maintain a record of fuel use for Boilers 9A and #9B, which shall include fuel purchase receipts indicating the quantity, supplier certification indicating the sulfur content of the purchased fuel and a copy of the specification waste oil characterization indicating the sulfur content of the waste oil. The fuel record shall be maintained on a monthly as well as on a calendar year basis.

Only waste oil meeting the criteria “specification” waste oil (as defined in the “Waste Oil Management Rules”) shall be burned in Boilers #9A and #9B.

A summary of the BACT analysis for Boilers #9A and #9B is as follows:

- a. BACT for #6 fuel oil is a sulfur content not to exceed 0.5% by weight.
- b. BACT for #4 fuel oil is a sulfur content not to exceed 0.5% by weight.
- c. BACT for specification waste oil is a sulfur content not to exceed 0.7% by weight.
- d. BACT for PM emissions is a limit of no greater than fuel 0.12 lb/MMBtu. PM₁₀ emissions limits are based on PM limits.
- e. NO_x emissions limits are based on previous license limit and other similar boilers.
- f. SO₂, CO and VOC emission limits are based upon AP-42 data dated 9/98.
- g. Visible emissions from each boiler stack shall not exceed 30% opacity on a 6-minute block average, except for no more than 2 six-minute block averages in a 3-hour period.

2. Smaller #2 fired Boilers

MCR also operates several smaller #2 fuel fired boilers to satisfy any of the facilities additional heating and hot water needs. These boilers include the Vat Room Boiler (2.05 MMBtu/hr), the Paint Shop Boiler (1.9 MMBtu/hr) and two small section heaters designated Heaters #1 and #2 (1.1 and 1.6 MMBtu/hr respectively). All of these boilers are below 10 MMBtu/hr and are therefore not subject to EPA New Source Performance Standards (NSPS) Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units applicable to boilers with a heat input of greater than 10 MMBtu/hr and manufactured after June 9, 1989).

MCR’s previous license restricted the facility to an annual fuel oil limit for the Vat Room Boiler, the Paint Shop Boiler and two small section heaters designated Heaters #1 and #2 combined of no greater than 100,000 gal/yr of #2 fuel oil with a sulfur content of no greater than 0.5% sulfur by weight based on a twelve-month rolling total. MCR has proposed an increase of this limit to 150,000 gal/year of #2 fuel oil.

The Department has determined that an increase in the fuel limit would require an application of BACT. In this case BACT is the requirement of fuel oil with a reduced sulfur content. BACT for #2 fuel is the requirement of a sulfur content of no greater than 0.35% sulfur by weight.

In order to demonstrate compliance with the above fuel oil restrictions, MCR shall maintain a record of fuel use for the #2 fuel oil fired boilers, which shall include fuel purchase receipts indicating the quantity and supplier certification indicating the sulfur content of the purchased fuel. The fuel record shall be maintained on a monthly as well as a twelve-month rolling total.

A summary of the BACT analysis for the Vat Room Boiler (2.05 MMBtu/hr), the Paint Shop Boiler (1.9 MMBtu/hr) and Heaters #1 and #2 (1.1 and 1.6 MMBtu/hr respectively) is as follows:

- a. BACT for #2 fuel oil is a sulfur content not to exceed 0.35% by weight.
- b. BACT for PM emissions is a limit of no greater than fuel 0.12 lb/MMBtu. PM₁₀ emissions limits are based on PM limits.
- c. NO_x emissions limits are based on previous license limit and other similar boilers.
- d. SO₂, CO and VOC emission limits are based upon AP-42 data dated 9/98.
- e. Visible emissions from each boiler stack shall not exceed 20% opacity on a 6-minute block average, except for no more than 2 six-minute block averages in a 3-hour period.

C. Power Washing Engines

MCR operates two diesel engines, designated Power Washer Engine #1 and Power Washer Engine #2, as power sources for pressure washers for cleaning locomotives and railcars. Power Washer Engine #1 is previously licensed equipment and Power Washer Engine #2 is a new emissions source. The engines have maximum design heat input capacities of 0.6 MMBtu/hr each. Because the Power Washer Engine #2 is considered new equipment, an application of BACT is required.

MCR was previously restricted to firing no greater than 20,000 gal/yr of #2 fuel with a sulfur content of no greater than 0.5% sulfur by weight in Power Washer Engine #1 based on a twelve-month rolling total. MCR has proposed an increase of this limit to 25,000 gal/year of #2 fuel oil based on a twelve-month rolling total. The Department has determined that, along with the addition of Power Washer Engine #2, an increase in the fuel limit would require an application of BACT. BACT for #2 fuel oil burning equipment requires the use of #2 fuel oil with a sulfur content of no greater than 0.35% sulfur by weight.

In order to demonstrate compliance with the above fuel oil restrictions, MCR shall maintain a record of fuel use for Power Washer Engines #1 and #2, which shall include fuel purchase receipts indicating the quantity and supplier certification indicating the sulfur content of the purchased fuel. The fuel record shall be maintained on a monthly as well as a twelve-month rolling total.

A summary of the BACT analysis for the Power Washer Engine #1 (0.6 MMBtu/hr) and Power Washer Engine #2, (0.6 MMBtu/hr) is as follows:

- a. BACT for #2 fuel oil is a sulfur content not to exceed 0.35% by weight.
- b. BACT for PM emissions is a limit of no greater than fuel 0.12 lb/MMBtu. PM₁₀ emissions limits are based on PM limits.
- c. SO₂, NO_x, CO and VOC emission limits are based upon AP-42 data dated 9/98 for large stationary diesel engines.
- d. Visible emissions from each engine stack shall not exceed 20% opacity on a 6-minute block average, except for no more than 2 six-minute block averages in a 3-hour period.

D. Painting Process

MCR utilizes spray paint booths for repainting locomotives and railcars. All of the spray booths vent to atmosphere with one booth venting to atmosphere via a particulate filter.

BPT for the control of particulate matter shall be filters on all spray booth vents. BPT shall be no visible emissions from the spray booth vents. MCR shall establish a maintenance, inspection and repair program for the spray paint booths which shall include periodic inspection of the spray booth vent filters to ensure that the filters are in good working order and repair or replacement of any damaged filters. Visible emissions from the spray booth vents shall not exceed 10% opacity on a six-minute block average.

Pollutants associated with the operation of painting equipment are PM, PM₁₀, volatile organic compounds (VOC) and Hazardous Air Pollutants (HAPs). BPT for the painting processes shall include good house keeping practices to minimize fugitive emissions. Good house keeping practices include covering paint storage containers when these containers are not in use, maintaining the seal around the suction hose from the paint drum when painting is being performed, cleaning excess and/or spilt material, proper containment and disposal of cleaning fluids from equipment cleaning processes and proper disposal of contaminated working equipment (gloves, coveralls, tools etc).

BPT for VOC emissions shall also be a maximum monthly average of 5.0 lb VOC per gallon of coating material. BPT shall also include a finish department annual VOC emission limit of 15.5 TPY (tons per year). Compliance will be based on monthly record keeping indicating the amount of product used on site and the VOC content by weight of the finish.

BPT for HAPs emissions from the painting process is a HAPs emissions limit of 5.0 TPY of any single HAP and 10.0 TPY of all combined HAPs. Compliance will be based on monthly record keeping indicating the amount of product used and percent HAP by weight in each product.

MCR, as a facility that performs surface coating of miscellaneous metal parts and products, could be subject to Chapter 129 of the Department Regulations regarding Surface Coating Facilities. However, MCR performs surface coating of transportation equipment and is therefore not subject to Chapter 129 of the Department Regulations as stated in Chapter 129, section 2, part A(5).

E. Shot Blasting Process

MCR utilizes a shot blast process to remove paint from railcars and locomotives before repainting. Before the railcar or locomotive is sent down the paint track to the paint room it is held in the shot blast room where it takes two people approximately 2 hours to shot blast all the paint and rust from the car or locomotive. Dust from the shot blast room is vented to atmosphere via a particulate filter.

Pollutants associated with shot blasting are particulate matter (PM) and particulate matter 10 microns and smaller in size (PM₁₀). BPT for PM and PM₁₀ for the shot blast process shall be closed doors in the shot blast room during shot blast operations, proper operation and maintenance of the filter system. MCR shall establish a maintenance, inspection and repair program for the shot blast booths which shall include periodic inspection of the shot blast booth vent filters to ensure that the filters are in good working order and repair or replacement of any damaged filters. BPT is also good housekeeping in the shot blast operations areas. Good housekeeping includes the cleaning and proper disposal of used or spilt material and proper storage of unused material and equipment.

Visible emissions from the shot blast process and dust collection equipment shall not exceed an opacity of 10% on a 6 minute block average basis.

F. Parts Degreasers

MCR has applied to include two identical Zep parts washers to the facility's licensed emissions equipment list. The two parts degreasers will be replacing three older parts degreasers that were not included in the facility's previous air emission license. The two new parts degreasers have capacities of 35 gallons each and utilize Zep Dyna 170 solvent.

MCR shall maintain a record of solvent use that shall include the amount of solvent added to the degreaser units and the dates that the solvent was added. The record shall be maintained on a monthly and a twelve-month rolling total basis. For purposes of record keeping, the amount of solvent used shall be considered as the difference between the amount of solvent added and the amount of solvent removed. If, in the future, MCR switches to a solvent that contains 1% VOC or less for use in the parts degreaser, to satisfy record keeping requirements, MCR need only keep a copy of the MSDS sheet that demonstrates the VOC content of the solvent on file at the MCR Waterville, Maine facility.

1. In accordance with Chapter 130, Section 3A of the Department regulations, MCR shall equip the parts degreasing unit with the following:
 - a. Equip the parts degreasing units with a cover that can be operated with one hand if vapor pressure >15 mmHG at 100°F, if the solvent is agitated or if the solvent is heated. [MEDEP Chapter 130]
 - b. Equip the parts degreasing units with an internal drainage basket so that parts are under the cover while draining if the solvent true vapor pressure > 32 mmHG at 100°F, except that the drainage basket may be external where an internal basket cannot fit into the degreaser. [MEDEP Chapter 130]
 - c. Affix the parts degreasing units with a permanent conspicuous label summarizing the following operating standards:
 - Close cover when not in use,
 - Drain cleaned parts for at least 15 seconds or until dripping ceases,
 - If applicable, solvent spray must be a solid fluid stream and shall not exceed a pressure of 10 pounds per square inch gauge (psig),
 - Do not degrease porous or absorbent materials,
 - Do not operate degreaser if draft is greater than 131.2 feet per minute (ft/min) as measured between 3.28 and 6.56 feet upwind and at the same elevation as the tank lip), and
 - Do not operate degreaser upon occurrence of any visible leak until such leak is repaired [MEDEP Chapter 130]

2. In accordance with Chapter 130, Section 3A of the Department regulations, MCR shall follow operational standards when making use of the facility's parts degreasers. [MEDEP Chapter 130]
3. In accordance with Chapter 130, Section 3A of the Department regulations, MCR shall implement one of the following control measures if the solvent true vapor pressure > 32 mmHG at 100°F or if the solvent is heated to above 120°F:
 - i. Freeboard height that gives a freeboard ratio (freeboard height divided by the smaller of the interior length, width or diameter) of greater than or equal to 0.7;
 - ii. Water cover at least 1 inch in depth (solvent shall be insoluble in and heavier than water); or
 - iii. Another system of equivalent control, such as refrigerated chiller or a carbon adsorber, approved by the Department and the Environmental Protection Agency (EPA). [MEDEP Chapter 130]

G. Annual Fuel and Emission Restrictions

MCR shall be restricted to the following, based on a 12-month rolling total:

- MCR shall be limited to firing no greater than a combined total of 250,000 gallons per year of a combination of specification waste oil with a sulfur content of 0.7% by weight, #6 fuel oil with a sulfur content of no greater than 0.5% sulfur by weight and #4 fuel oil with a sulfur content of no greater than 0.5% sulfur by weight in Boilers #9A and #9B. Only waste oil meeting the criteria "specification" waste oil (as defined in the "Waste Oil Management Rules") shall be burned in Boiler #9A and #9B.
- MCR shall be limited to firing no greater than a total of 150,000 gallons per year of #2 fuel oil with a sulfur content of no greater than 0.35% sulfur by weight in the Vat Room Boiler, the Paint Shop Boiler and Heaters #1 and #2.
- MCR shall be limited to firing no greater than a total of 25,000 gallons per year of #2 fuel oil with a sulfur content of no greater than 0.35% sulfur by weight in Power Washer Engines #1 and #2.
- Facility shall not exceed a maximum monthly average of 5.0 lb VOC per gallon of coating material and coating department annual VOC emission limit of 15.5 tons per year.

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Total Allowable Annual Emission for the Facility
(used to calculate the annual license fee)

Pollutant	Tons/Year				
	Painting	Boilers 9A & 9B	Small Boilers	Power Washers	Total
PM	-	2.3	1.3	0.2	3.8
PM ₁₀	-	2.3	1.3	0.2	3.8
SO ₂	-	13.7	3.7	0.6	18.0
NO _x	-	6.9	3.2	7.6	15.6
CO	-	0.6	0.4	1.6	2.5
VOC	15.0	0.04	0.03	0.6	15.7
HAPs*	10.0	-	-	-	10.0
Individual HAPs*	5.0	-	-	-	5.0

* HAPs are identified by the EPA in regulations pursuant to Section 112(b) of the Clean Air Act (CAA).

III.AMBIENT AIR QUALITY ANALYSIS

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a renewal source shall be determined on a case-by case basis. Based on the above total facility emissions, MCR is below the emissions level required for modeling and monitoring.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-428-71-G-R/A subject to the following conditions:

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (Title 38 MRSA §347-C).

- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115.
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both.
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request.
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353.
- (6) The license does not convey any property rights of any sort, or any exclusive privilege.
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions.
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request.
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license.
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license.

- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
- (i) perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 - a. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
 - b. pursuant to any other requirement of this license to perform stack testing.
 - (ii) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - (iii) submit a written report to the Department within thirty (30) days from date of test completion.
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
- (i) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - (ii) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

- (iii)the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement.
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emissions and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation.
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.

SPECIFIC CONDITIONS

- (16) Boilers #9A and #9B
- A. MCR shall be limited to firing no greater than a combined total of 250,000 gallons per year of a combination of specification waste oil with a sulfur content of 0.7% by weight, #6 fuel oil with a sulfur content of no greater than 0.5% sulfur by weight and #4 fuel oil with a sulfur content of no greater than 0.5% sulfur by weight in Boilers #9A and #9B, based on a twelve-month rolling total. [MEDEP Chapter 115, BACT]
- B. MCR shall maintain a record of fuel use for Boilers 9A and #9B, which shall include fuel purchase receipts indicating the quantity of fuel purchased, supplier certification indicating the sulfur content of the purchased fuel and a copy of the specification waste oil characterization indicating the sulfur content of the waste oil. The fuel record shall be maintained on a monthly as well as twelve-month rolling total. [MEDEP Chapter 115, BACT]

C. Emissions shall not exceed the following:

Equipment		PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Boiler #9A	lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	0.1	0.1	0.2	2.6	0.6	0.2
Boiler #9B	lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	0.1	0.1	0.2	2.6	0.6	0.2

[MEDEP Chapter 115, BACT]

D. Visible emissions from each boiler stack shall not exceed 30% opacity on a 6-minute block average except, for no more than 2 six-minute block averages in a 3-hour period. [MEDEP Chapter 101]

(17) Smaller #2 fired Boilers

A. MCR shall be limited to firing no greater than a total of 150,000 gallons per year of #2 fuel oil with a sulfur content of no greater than 0.35% sulfur by weight in the Vat Room Boiler, the Paint Shop Boiler and Heaters #1 and #2, based on a twelve-month rolling total. [MEDEP Chapter 115, BACT]

B. MCR shall maintain a record of fuel use for the Vat Room Boiler, the Paint Shop Boiler and Heaters #1 and #2, which shall include fuel purchase receipts indicating the quantity of fuel purchased and supplier certification indicating the sulfur content of the purchased fuel. The fuel record shall be maintained on a monthly as well as a twelve-month rolling total. [MEDEP Chapter 115, BACT]

C. Emissions shall not exceed the following:

Equipment		PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Heater #1	lb/hr	0.1	0.1	0.4	0.3	0.04	0.003
Heater #2	lb/hr	0.2	0.2	0.6	0.5	0.1	0.004
Vat Room Boiler	lb/hr	0.3	0.3	0.7	0.6	0.1	0.01
Paint Shop Boiler	lb/hr	0.2	0.2	0.7	0.6	0.1	0.005

[MEDEP Chapter 115, BACT]

D. Visible emissions from each boiler stack shall not exceed 30% opacity on a 6-minute block average except, for no more than 2 six-minute block averages in a 3-hour period. [MEDEP Chapter 101]

(18) Power Washing Engines

- A. MCR shall be limited to firing no greater than a total of 25,000 gallons per year of #2 fuel oil with a sulfur content of no greater than 0.35% sulfur by weight in Power Washer Engines #1 and #2, based on a twelve-month rolling total. [MEDEP Chapter 115, BACT]
- B. MCR shall maintain a record of fuel use for Power Washer Engines #1 and #2, which shall include fuel purchase receipts indicating the quantity of fuel purchased and supplier certification indicating the sulfur content of the purchased fuel. The fuel record shall be maintained on a monthly as well as a twelve-month rolling total. [MEDEP Chapter 115, BACT]
- C. Emissions shall not exceed the following:

Equipment		PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Power Washer Engine #1	lb/hr	0.2	0.2	0.6	5.5	1.5	0.6
Power Washer Engine #1	lb/hr	0.2	0.2	0.6	5.5	1.5	0.6

[MEDEP Chapter 115, BACT]

- D. Visible emissions from each engine stack shall not exceed 30% opacity on a 6-minute block average except, for no more than 2 six-minute block averages in a 3-hour period. [MEDEP Chapter 101]

(19) Painting Process

- A. MCR shall establish a maintenance, inspection and repair program for the spray paint booths which shall include periodic inspection of the spray boot vent filters and repair or replacement of any damaged filters.
- B. MCR shall maintain good house keeping practices to minimize fugitive emissions from the painting process.
- C. VOC emissions from the use of paints shall be documented by monthly record keeping indicating the amount of coatings used on site and the VOC content of the coatings. MCR shall not exceed a monthly average of 5.0 pounds of VOC per gallon of coating material and MCR shall be restricted to a coating department annual VOC emission limit of 15.0 tons per year.
- D. HAP emissions shall be documented by monthly record keeping indicating the amount of products used and the percent of HAP content of each product. Total facility HAP emissions shall be limited to 5.0 tons per year of any single HAP and 10.0 tons per year of all combined HAPs.

- E. Visible emissions from the spray booth vents shall not exceed 10% opacity on a six-minute block average.
- (20) Shot Blasting
- A. MCR shall keep all doors closed to the shot blast room during shot blast operations.
- B. MCR shall establish a maintenance, inspection and repair program for the shot blast booths which shall include periodic inspection of the shot blast booth vent filters to ensure that the filters are in good working order and repair or replacement of any damaged filters.
- C. MCR shall also make use of good housekeeping practices in the cleaning and proper disposal of used or spilt material and proper storage of unused material and equipment.
- D. Visible emissions from the shot blast booth vents shall not exceed 10% opacity on a six-minute block average.
- (21) Parts Degreasers
- A. In accordance with Chapter 130, Section 3A of the Department regulations, MCR shall follow equipment and operational standards when making use of the parts degreasers. [MEDEP Chapter 130]
- B. In accordance with Chapter 130 section 3A of the Department regulations, MCR shall equip the parts degreasing units with the following:
1. Equip the parts degreaser with a cover that can be operated with one hand if vapor pressure >15 mmHG at 100°F, if the solvent is agitate or if the solvent is heated. [MEDEP Chapter 130]
 2. Equip the parts degreaser with an internal drainage basket so that parts are under the cover while draining if the solvent true vapor pressure > 32 mmHG at 100°F, except that the drainage basket may be external where an internal basket cannot fit into the degreaser. [MEDEP Chapter 130]
 3. Affix the parts degreaser with a permanent conspicuous label summarizing the following operating standards:
 - Close cover when not in use,
 - Drain cleaned parts for at least 15 seconds or until dripping ceases,

- If applicable, solvent spray must be a solid fluid stream and shall not exceed a pressure of 10 pounds per square inch gauge (psig),
- Do not degrease porous or absorbent materials,
- Do not operate degreaser if draft is greater than 131.2 feet per minute (ft/min) as measured between 3.28 and 6.56 feet upwind and at the same elevation as the tank lip), and
- Do not operate degreaser upon occurrence of any visible leak until such leak is repaired [MEDEP Chapter 130]

C. In accordance with Chapter 130 section 3A of the Department regulations, MCR shall implement one of the following control measures if the solvent true vapor pressure > 32 mmHG at 100°F or if the solvent is heated to above 120°F:

- i. Freeboard height that gives a freeboard ratio (freeboard height divided by the smaller of the interior length, width or diameter) of greater than or equal to 0.7;
- ii. Water cover at least 1 inch in depth (solvent shall be insoluble in and heavier than water); or
- iii. Another system of equivalent control, such as refrigerated chiller or a carbon adsorber, approved by the Department and the Environmental Protection Agency (EPA). [MEDEP Chapter 130]

D. MCR shall maintain a record of solvent use for the parts degreaser. The record shall include solvent added and removed, the dates when solvent is added and the volume of solvent added and removed and the VOC content of the solvent. If, in the future, MCR switches to a solvent that contains 1% VOC or less for use in the parts degreaser, to satisfy record keeping requirements MCR need only keep a copy of the MSDS sheet that demonstrates the VOC content of the solvent on file at the MCR facility. [MEDEP Chapter 140, BPT]

- (22) Visible emissions from any general process, including shot blasting and shot blast handling shall not exceed an opacity of 10% on a 6-minute block average, except for no more than 1 six-minute block average in a 1-hour period.
- (23) Potential sources of fugitive PM emissions including shot blast storage and shot blast waste removal shall be carried out in a manner to prevent visible emissions in excess of 10% opacity on a three (3) minute block average basis.

**Maine Central Railroad
Kennebec County
Waterville, Maine
A-428-71-G-R/A**

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**Departmental
Findings of Fact and Order
Air Emission License**

- (24) MCR shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (Title 38 MRSA §605-C).
- (25) Annual Emission Statement

In accordance with MEDEP Chapter 137, the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of:

- 1) A computer program and accompanying instructions supplied by the Department; or
- 2) A written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions should be directed to:

Attn: Criteria Emission Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

Phone: (207) 287-2437

The emission statement must be submitted by September 1 or as otherwise specified in Chapter 137.

Maine Central Railroad
Kennebec County
Waterville, Maine
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**Departmental
Findings of Fact and Order
Air Emission License**

- (26) MCR shall pay the annual air emission license fee within 30 days of September 30 of each year. Pursuant to 38 MRSA 353(A), failure to pay this annual fee in the stated timeframe is sufficient grounds for the revocation of the license under section 341-D, Subsection 3.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF , 2006.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAVID P. LITTELL, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

The term of this Order shall be for five (5) years from the signature below.

Date of initial receipt of application: **July 25, 2005**

Date of application acceptance: **August 17, 2005**

Date filed with the Board of Environmental Protection: _____

This Order prepared by, Peter G. Carleton, Bureau of Air Quality